IN THE CLAIMS:

Please write the claims to read as follows:

1. (Original) A network device, comprising:

a first linecard receiving input computer network packets from a computer network, said line card translating said packets into segments;

a switching fabric receiving segments from said linecard, said switching fabric to route said segments to a desired output linecard, said switching fabric having at least one queue therein, said queue having a threshold such that in the event that a segment arrives at said queue and said queue is filled above said threshold, a bit of said segment is set as said segment is passed out of said queue, said bit being set "marking" said segment as that segment having passed through a queue filled above said lower threshold level;

a second line card receiving said segments from said switching fabric, said second linecard translating said segments into a computer network packet for transmission by said second linecard out through a port connected to an output computer network;

a circuit determining whether or not a particular segment of said segments received by said second linecard has said bit set indicating that said segment is marked, and in response to detecting a segment as being marked, discarding said output packet in accordance with a random probability, and in response to detecting that no segment of said output packet is marked, transmitting said output packet onto said computer network.

2. (Original) The apparatus as in claim 1 wherein said circuit further comprises a hardware computer chip.

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1 3. (Original) The apparatus as in claim 1 wherein said circuit further comprises an ASIC

2 chip mounted on said output linecard.

1 4. (Original) The apparatus as in claim 1 wherein said circuit further comprises a micro-

2 processor.

1 5. (Original) The apparatus as in claim 1 wherein said circuit further comprises a hard-

2 ware chip operating with a microprocessor.

1 6. (Previously Presented) A network device, comprising:

2 a first linecard receiving input computer network packets from a computer net-

3 work, said line card translating said packets into segments;

4 a switching fabric receiving segments from said linecard, said switching fabric to

5 route said segments to a desired output linecard, said switching fabric having at least one

6 queue therein, said queue having a threshold such that in the event that a segment arrives

7 at said queue and said queue is filled above said threshold, a bit of said segment is set as

8 said segment is passed out of said queue, said bit being set "marking" said segment as

9 that segment having passed through a queue filled above said lower threshold level;

10 a second line card receiving said segments from said switching fabric, said second

11 linecard translating said segments into a computer network packet for transmission by

12 said second linecard out through a port connected to an output computer network;

13 a circuit determining whether or not a particular segment of said segments re-

14 ceived by said second linecard has said bit set indicating that said segment is marked, and

15 in response to detecting a segment as being marked, discarding said output packet in ac-

16 cordance with a random probability, and in response to detecting that no segment of said

17 output packet is marked, transmitting said output packet onto said computer network;

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18 said circuit counting a total number of segments received by said output linecard;

19 said circuit counting a number of said segments received by said linecard which

20 are marked;

21 said circuit calculating a ratio R by dividing said number of marked segments by

22 said total number of segments;

23 said circuit calculating a random number, said random number having a value

24 between zero and a maximum value of said ratio R; and

25 said circuit causing said packet to be discarded in the event that said ratio R is

26 greater than said random number.

1 7. (Original) The apparatus as in claim 1 wherein said circuit further comprises:

2 logic for detecting a priority class of at least a selected packet of said input com-

3 puter network packets, and in response to said priority class, selecting class specific val-

4 ues in calculating a probability for discarding an output packet corresponding to said se-

5 lected input packet.

1 8. (Original) A method for operating a network device, comprising:

2 receiving computer network packets from an input computer network;

3 translating said packets into segments;

4 receiving said segments in a switching fabric, said switching fabric to route said

5 segments to a desired output linecard, said switching fabric having at least one queue

6 therein, said queue having a threshold such that in the event that a segment arrives at said

7 queue and said queue is filled above said threshold, a bit of said segment is set as said

8 segment is passed out of said queue, said bit being set "marking" said segment as that

9 segment having passed through a queue filled above said threshold level;

10   receiving said segment from said switching fabric by an output linecard, said out-

11   put linecard translating said segments into a computer network packet for transmission by

12   said output linecard out through a port connected to an output computer network;

13   determining whether or not a particular segment of said segments received by said

14   output linecard has said bit set indicating that said segment is marked;

15   discarding said output packet, in response to detecting a segment as being marked,

16   in accordance with a random probability, and in response to detecting that no segment of

17   said output packet is marked, transmitting said output packet onto said computer network.

1   9. (Previously Presented) A method for operating a network device, comprising:

2   receiving computer network packets from an input computer network;

3   translating said packets into segments;

4   receiving said segments in a switching fabric, said switching fabric to route said

5   segments to a desired output linecard, said switching fabric having at least one queue

6   therein, said queue having a threshold such that in the event that a segment arrives at said

7   queue and said queue is filled above said threshold, a bit of said segment is set as said

8   segment is passed out of said queue, said bit being set "marking" said segment as that

9   segment having passed through a queue filled above said threshold level;

10   receiving said segment from said switching fabric by an output linecard, said out-

11   put linecard translating said segments into a computer network packet for transmission by

12   said output linecard out through a port connected to an output computer network;

13   determining whether or not a particular segment of said segments received by said

14   output linecard has said bit set indicating that said segment is marked;

15   discarding said output packet, in response to detecting a segment as being marked,

16   in accordance with a random probability, and in response to detecting that no segment of

17 said output packet is marked, transmitting said output packet onto said computer net-

18 work;

19 counting a total number of segments received by said output linecard;

20 counting a number of said segments received by said linecard which are marked;

21 calculating a ratio R by dividing said number of marked segments by said total

22 number of segments, the value of ratio R having a maximum value;

23 calculating a random number, said random number having a value between zero

24 and said maximum value of ratio R; and

25 causing said packet to be discarded in the event that said ratio R is greater than

26 said random number.

1 10. (Original) The method for operating a network device of claim 8 further comprising:

2 detecting a priority class of at least a selected packet of said input computer net-

3 work packets;

4 selecting, in response to said priority class, class specific values in calculating a

5 probability for discarding an output packet corresponding to said selected input packet.

1 11. (Currently Amended) A computer readable device containing instructions for per-

2 forming the method of, ~~claim 8~~

3 receiving computer network packets from an input computer network;

4 translating said packets into segments;

5 receiving said segments in a switching fabric, said switching fabric to route said

6 segments to a desired output linecard, said switching fabric having at least one queue

7 therein, said queue having a threshold such that in the event that a segment arrives at said

8 queue and said queue is filled above said threshold, a bit of said segment is set as said

9   segment is passed out of said queue, said bit being set "marking" said segment as that

10   segment having passed through a queue filled above said threshold level;

11   receiving said segment from said switching fabric by an output linecard, said out-

12   put linecard translating said segments into a computer network packet for transmission by

13   said output linecard out through a port connected to an output computer network;

14   determining whether or not a particular segment of said segments received by said

15   output linecard has said bit set indicating that said segment is marked;

16   discarding said output packet, in response to detecting a segment as being marked,

17   in accordance with a random probability, and in response to detecting that no segment of

18   said output packet is marked, transmitting said output packet onto said computer network.

1   12 (Currently Amended) Electromagnetic signals propagating on a computer network,

2   said electromagnetic signals containing instructions for performing the method of, ~~claim~~

3   ~~8~~

4   receiving computer network packets from an input computer network;

5   translating said packets into segments;

6   receiving said segments in a switching fabric, said switching fabric to route said

7   segments to a desired output linecard, said switching fabric having at least one queue

8   therein, said queue having a threshold such that in the event that a segment arrives at said

9   queue and said queue is filled above said threshold, a bit of said segment is set as said

10   segment is passed out of said queue, said bit being set "marking" said segment as that

11   segment having passed through a queue filled above said threshold level;

12   receiving said segment from said switching fabric by an output linecard, said out-

13   put linecard translating said segments into a computer network packet for transmission by

14   said output linecard out through a port connected to an output computer network;

15   determining whether or not a particular segment of said segments received by said

16   output linecard has said bit set indicating that said segment is marked;

17   discarding said output packet, in response to detecting a segment as being marked,

18   in accordance with a random probability, and in response to detecting that no segment of

19   said output packet is marked, transmitting said output packet onto said computer network.

Please insert the following new claims 13 *et seq.*:

1   13. (New) A method for use in a network device, the method comprising the steps of:

2   receiving an input packet at an input linecard;

3   translating the input packet into segments;

4   forwarding the segments to a switching fabric, the switching fabric having at least

5   one queue;

6   setting a bit in a particular segment as "marked" in the event the particular seg-

7   ment passes through a queue filled above a threshold;

8   forwarding the segments to an appropriate output linecard;

9   translating the segments into an output packet; and

10   discarding the output packet, in accordance with a random probability, in the

11   event a particular segment of the output packet is marked.

1   14. (New) The method as in claim 13, further comprising: transmitting the output packet

2   in the event that no segment of the output packet is marked.

1   15. (New) The method as in claim 13, further comprising:

2   counting a total number of segments received by the output linecard;

3   counting a number of the segments received by the output linecard that are

4   marked;

5   calculating a ratio R by dividing the number of marked segments by the total

6   number of segments, the value of ratio R having a maximum value;

7   calculating a random number, the random number having a value between zero

8   and the maximum value of ratio R; and

9   causing the packet to be discarded in the event that the ratio R is greater than the

10   random number.

1   16. (New) The method as in claim 13, further comprising:

2   detecting a priority class of the input packet; and

3   selecting, in response to the priority class, class specific values in calculating a

4   probability for discarding an output packet corresponding to the input packet.

1   17. (New) A network device, comprising:

2   an input linecard to receive an input packet, translate the input packet into seg-

3   ments, and forward the segments;

4   a switching fabric to receive the segments, the switching fabric having at least one

5   queue, the switching fabric to set a bit in a particular segment as "marked" in the event

6   the particular segment passes through a queue filled above a threshold, and to forward the

7   segments;

8   an output linecard to receive the appropriate segments, translate the segments into

9   an output packet, and discard the output packet, in accordance with a random probability,

10   in the event a particular segment of the output packet is marked.

1   18. (New) The network device as in claim 17, further comprising: the output linecard to

2   transmit the output packet in the event that no segment of the output packet is marked.

1   19. (New) The network device as in claim 17, further comprising:

2   a circuit to,

3   i) count a total number of segments received by the output linecard;

4   ii) count a number of the segments received by the output linecard that are

5   marked;

6   iii) calculate a ratio R by dividing the number of marked segments by the

7   total number of segments, the value of ratio R having a maximum value;

8   iv) calculate a random number, the random number having a value be-

9   tween zero and the maximum value of ratio R; and

10   v) cause the packet to be discarded in the event that the ratio R is greater

11   than the random number.

1   20. (New) The network device as in claim 17, further comprising: logic to detect a pri-

2   ority class of the input packet, and select, in response to the priority class, class specific

3   values in calculating a probability for discarding an output packet corresponding to the

4   input packet.

1   21. (New) A network device, comprising:

2   means for receiving an input packet at an input linecard;

3   means for translating the input packet into segments;

4   means for forwarding the segments to a switching fabric, the switching fabric

5   having at least one queue;

6   means for setting a bit in a particular segment as "marked" in the event the par-

7   ticular segment passes through a queue filled above a threshold;

8   means for forwarding the segments to an appropriate output linecard;

9   means for translating the segments into an output packet; and

10   means for discarding the output packet, in accordance with a random probability,

11   in the event a particular segment of the output packet is marked.

1   22. (New) A computer readable media, comprising: the computer readable media con-

2   taining instructions for execution on a processor for the practice of the method of,

3   receiving an input packet at an input linecard;

4   translating the input packet into segments;

5   forwarding the segments to a switching fabric, the switching fabric having at least

6   one queue;

7   setting a bit in a particular segment as "marked" in the event the particular seg-

8   ment passes through a queue filled above a threshold;

9   forwarding the segments to an appropriate output linecard;

10   translating the segments into an output packet; and

11   discarding the output packet, in accordance with a random probability, in the

12   event a particular segment of the output packet is marked.

1   23. (New) Electromagnetic signals, comprising: the electromagnetic signals carrying

2   instructions for execution on a processor for the practice of the method of,

3   receiving an input packet at an input linecard;

4   translating the input packet into segments;

5   forwarding the segments to a switching fabric, the switching fabric having at least

6   one queue;

7   setting a bit in a particular segment as "marked" in the event the particular seg-

8   ment passes through a queue filled above a threshold;

9   forwarding the segments to an appropriate output linecard;

10   translating the segments into an output packet; and

11   discarding the output packet, in accordance with a random probability, in the

12 event a particular segment of the output packet is marked.